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PATENT Case No. 21350YP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: HA[illegible]

Serial No. 10/579,605

Filed: May 17, 2006

For: RHESUS MONKEY DICKKOPF-4, NUCLEOTIDES ENCODING SAME, AND USES THEREOF

Art Unit: 1647

Examiner: --

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

Sir:

1. In compliance with 37 C.F.R. 1.97, submitted on the attached form herewith is a list of patents, publications or other information which are requested to be made of record in this application. This Information Disclosure Statement is not an admission that any patent, publication or other information referred to herein is "prior art" for this invention. In accordance with 37 C.F.R. 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56(b).

2. In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

3. Applicants respectfully request that the Examiner initial the attached form after reviewing the pertinence of each reference.

4. Pursuant to 37 C.F.R. 1.98 (a)(2)(ii), copies of each cited U.S. patent and each U.S. patent application publication are not enclosed herewith.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date appearing below.

MERCK & CO., INC.

By _____ Date 4/17/2007

PATENT Case No. 21350YP

INFORMATION DISCLOSURE STATEMENT

5. Pursuant to 37 C.F.R. 1.98(d), copies of references listed on the attached form that were submitted to or cited by the Office in a related application upon which the instant application relies for an earlier filing date under 35 U.S.C. 120 are not enclosed. Related application(s) in which references were submitted to or cited by the Office are as follows:

	RELATED APPLICATION	
U. S. SERIAL NUMBER	FILING DATE	MERCK CASE

If this is inconvenient, additional copies will be submitted upon request.

6. In accordance with 37 C.F.R. 1.97, (check one)

☐ the attached information is filed within three months of the filing date of the captioned case.

☑ the attached information is filed more than three months after the filing date but prior to the mailing of a first Office Action on the merits.

☐ the attached information is filed before the mailing of a first Office action after the filing of a request for continued examination under §1.114.

☐ the attached information is being filed more than three months after the filing date and after the mailing of a first Office Action on the merits, but before the mailing date of a Final Action, Notice of Allowance, or an action that otherwise closes prosecution in the application. The enclosed authorization is therefore given to charge Deposit Account No. 13-2755 for the fee required under 37 C.F.R. 1.17(p).

☐ each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement.

☐ each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart application *and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the information disclosure statement.*

☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated under 37 C.F.R. 1.56(c) more than three months prior to the filing of this Statement.

Respectfully submitted,

By: JOHN DAVID REILLY
Attorney For Applicant(s)
Reg. No. 43,039
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Date: April 16, 2007

Approved for use through 09/30/2006. OMB 0651-0031
SUBSTITUTE for PTO/SB/08A (07-06), Information Disclosure Statement by Applicant
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

COMPLETE IF KNOWN	
Application Number	10/579,605
Filing Date	May 17, 2006
First Named Inventor	Harada et al.
Group Art Unit	1647
Examiner Name	--
Attorney Docket Number	21350YP

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		2005/0079173		Niehrs et al.	04/14/2005
		2005/0069915		McCarthy	03/31/2005
		2003/0068312		McCarthy	04/10/2003
		2003/0181660		Todd et al.	09/25/2003

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document Office	Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
			WO 02/092015		Genome Therapeutics Corporation/Wyeth	11/21/2002
			WO 00/52047		Millennium Pharmaeuticals, Inc.	09/08/2000
			WO 99/22000		Deutsches Krebsforschungszentrum Stiftung des Offentlichen Rechts	05/06/1999
			WO 98/46755		Millennium Biotherapeutics, Inc.	10/22/1998
			WO 98/46743		The Wellcome Trust Limited as trustee to The Wellcome Trust/Merck & Co., Inc.	10/22/1998

Examiner Signature		Date Considered	

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Sheet	2	of	3

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Application Number	10/579,605
Filing Date	May 17, 2006
First Named Inventor	Harada et al.
Group Art Unit	1647
Examiner Name	--
Attorney Docket Number	21350YP

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
	AA	Bafico et al., Nature Cell Biology, Vol. 3 (2001), pp. 683-686, "Novel mechanism of Wnt signalling inhibition mediated by Dickkopf-1 interaction with LRP6/Arrow"
	AB	Bennett et al., J. of Biol. Chem., Vol. 277 (2002), pp. 30998-31004, "Regulation of Wnt signaling during adipogenesis"
	AC	Boyden et al., N. Eng. J. of Med., Vol. 346 (2002), pp. 1513-1521, "High bone density due to a mutation in LDL-receptor-related protein 5"
	AD	Davidson et al,. Development, Vol. 129 (2002), pp. 5587-5596, "Kremen proteins interact with Dickkopf1 to regulate anteroposterior CNS patterning"
	AE	Fujino et al., PNAS, Vol. 100 (2003), pp. 229-234, "Low-density lipoprotein receptor-related protein 5 (LRP5) is essential for normal cholesterol metabolism and glucose-induced insulin secretion"
	AF	Glinka et al., Nature, Vol. 391 (1998), pp. 357-362, "Dickkopf-1 is a member of a new family of secreted proteins and functions in head induction"
	AG	Gong et al., Cell, Vol. 107 (2001), pp. 513-523, "LDL receptor-related protein 5 (LRP5) affects bone accrual and eye development"
	AH	Hey et al., Gene, Vol. 216 (1998), pp. 103-111, "Cloning of a novel member of the low-density lipoprotein receptor family"
	AI	Hsu et al., Molecular and Cellular Biol., Vol. 18 (1998), pp. 4807-4818, "Modulation of transcriptional regulation by LEF-1 in response to Wnt-1 signaling and association with beta-catenin"
	AJ	Katagiri et al., J. of Cell Biology, Vol. 127 (1994), pp. 1755-1766, "Bone morphogenetic protein-2 converts the differentiation pathway of C2C12 myoblasts into the osteoblast lineage"
	AK	Kato et al., J. of Cell Biology, Vol. 157 (2002), pp. 303-314, "Cbfa1-independent decrease in osteoblast proliferation, osteopenia, and persistent embryonic eye vascularization in mice deficient in Lrp5, a Wnt coreceptor"
	AL	Krupnik et al., Gene, Vol. 238 (1999), pp. 301-313, "Functional and structural diversity of the human Dickkopf gene family"
	AM	Li et al., The EMBO Journal, Vol. 18 (1999), pp. 4233-4240, "Axin and Frat1 interact with Dvl and GSK, bridging Dvl to GSK in Wnt-mediated regulation of LEF-1"
	AN	Little et al., Am. J. Hum. Genet., Vol. 70 (2002), pp. 11-19, "A mutation in the LDL receptor-related protein 5 gene results in the autosomal dominant high-bone-mass trait"
	AO	Magoori et al, J. of Biol. Chem., Vol. 278 (2003), pp. 11331-11336, "Severe hypercholesterolemia, impaired fat tolerance, and advanced atherosclerosis in mice lacking both low density lipoprotein receptor-related ..."

Examiner Signature		Date Considered	

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
	AP	Mao et al., Gene, Vol. 302 (2003), pp. 179-183, Kremen2 modulates Dickkopf2 activity during Wnt/LRP6 signaling"
	AQ	Mao et al., Molecular Cell, Vol. 7 (2001), pp. 801-809, "Low-density lipoprotein receptor-related protein-5 binds to axin and regulates the canonical Wnt signaling pathway"
	AR	Mao et al., Nature, Vol. 411 (2001), pp. 321-325, "LDL-receptor-related protein 6 is a receptor for Dickkopf proteins"
	AS	Mao et al., Nature, Vol. 410 (2002), pp. 664-667, "Kremen proteins are Dickkopf receptors that regulate Wnt/beta-protein signaling"
	AT	Patel et al., N. Eng. J. Med., Vol. 346 (2002), pp. 1572-1574, "Regulation of bone formation and vision by LRP5"
	AU	Semenov et al., Current Biology, Vol. 11 (2001), pp. 951-961, "Head inducer Dickkopf-1 is a ligand for Wnt coreceptor LRP6"
	AV	Sjolander et al., Anal. Chem., Vol. 63 (1991), pp. 2338-2345, "Integrated fluid handlding system for biomolecular interaction analysis"
	AW	Szabo et al., Current Opin. in Structural Biol., Vol. 5 (1995), pp. 699-705, "Surface plasmon resonance and its use in biomolecular interaction analysis (BIA)"
	AX	Yuan et al., J. of Biol. Chem., Vol. 274 (1999), pp. 30419-30423, "Suppression of glycogen synthase kinase activity is not sufficient for leukemia enhancer factor-1 activation"
	AY	Yamaguchi et al., Biochem. and Biophys. Res. Comm., Vol. 220 (1996), pp. 366-371, "Effects of BMP-2, BMP-4, and BMP-6 on osteoblastic differentiation of bone marrow-derived stromal cell lines, ST2 and ..."

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